STATEMENT OF LEGAL AND FACTUAL BASIS

Georgia-Pacific Corporation
Highway 301, Skippers, Virginia
Permit No. PRO-50941

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Georgia-Pacific Corporation has applied for a Title V Operating Permit for its Skippers, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Regional Permit Manager:_____ Date:_____

1. Introduction

1. Facility Information

Permittee/Facility
Georgia-Pacific Corporation
P.O. Box 309
Skippers, VA 23879

Responsible Official
Dr. F. S. Lin
Plant Manager
(804) 283-1066

Facility Contact
Clint Joyner
Environmental Coordinator
(804) 634-6133

Registration No.: 50941
County-Plant No.: 081-0037

2. Source Description

The facility is an oriented strand board (OSB) manufacturing facility (SIC 2493) which is operated by Georgia-Pacific Corporation. The facility is currently permitted by a NSR permit dated October 6, 1997. This is a facility-wide permit covering all the major areas of the plant, including wafer drying operations, board pressing operations, material handling operations, and combustion operations.

a. Compliance History

The facility was originally constructed in 1985 in accordance with a construct and operate permit issued in 1984. This 1984 permit did not include VOC emissions, as none were reported by Georgia-Pacific (GP). Subsequent to these events, it was discovered that there were VOC emissions from the board pressing and wafer drying operations of this facility, as well as other OSB plants around the country, at major source (>250 tons/yr) levels. Subsequently, GP agreed to a consent order with DEQ and EPA to limit the VOC emissions below PSD thresholds by installing VOC control equipment at the Skippers OSB plant in lieu of obtaining a PSD permit. The VOC control devices, two Regenerative Thermal Oxidizers (RTO), were installed and began operating in 1997. The facility reports that they are currently in compliance with all applicable requirements. This is confirmed by the latest inspection, dated 7/31/2002, where the facility was judged to be in compliance at the time of the inspection.

2. Emissions Units

a. Process Equipment

Ref. No.	Stack ID	Process Description	Maximum Rated Capacity
1000/1350	11	Chipper/Green Chip Handling	1.8 dry tons/hr
1100	fugitive	Log Preparation Area	225 tons/hr
1200	fugitive	Log Debarking	225 tons/hr
1300	fugitive	Block Preparation Area	225 tons/hr

3000	52A & B	Natural Gas Burner used as a backup system for the thermal oil heater portion of the Wellons Wood Fuel Burner	50 x 10^6 Btu/hr
-	-	MEC Dry Fuel Burner	50 x 10^6 Btu/hr
-	-	Natural Gas Burner used as a backup system for the MEC Dry Fuel Burner	50 x 10^6 Btu/hr
-	-	Wellons Wood Fuel Burner	210 x 10^6 Btu/hr
-	-	Flake Dryers #1-4	50.0 dry tons/hr
3100	15	Screen Fines Transfer	5.0 dry tons/hr
3200	16	Dry Waste Transfer	3.8 dry tons/hr
3300	18	Sanderdust/Hog Fuel Storage/Transfer	15.1 dry tons/hr
3400	19	Grit Fines Transfer	0.8 dry tons/hr
3500	20	Fuel Screen Fines Storage Bin/MEC Raw Fuel Transfer System	10.5 dry tons/hr
3600	21	Dry Fuel Hammermill/MEC Prepared Fuel Transfer System	11.5 dry tons/hr
5000	54	Board Press	40.0 dry tons/hr
5100	13	Forming & Finishing End Pickups	44.0 dry tons/hr
5200	17	Mat Reject System	2.1 dry tons/hr
6100	12	Panel Sanding/Tongue & Groove	22.7 dry tons/hr
6200	7-345	Edge Seal Spray Booth	10.0 gal/hr
9100	14a	General Plant Dedusting - System A	0.1 dry tons/hr
9200	14b	General Plant Dedusting - System B	0.1 dry tons/hr

b. Control Equipment:

Stack No./ Emission Unit No.	Control Equipment Description	Manufacturer and Date of Construction	Size/Rated Capacity	Pollutant
11 CYC-1	Cyclone	Classic Systems - 5' diameter cyclone	99%+ design	TSP/PM10
52 A/B RTO 1-2	Direct flame afterburner	Smith Engineering Company 2-8 canister RTOs	90% design	TSP/PM10, Particulate HAPs
52 A/B RTO 1-2	Direct flame afterburner	Smith Engineering Company 2-8 canister RTOs	94.3% actual	VOC, Organic HAPs
52 A/B RTO 1-2	Direct flame afterburner	Smith Engineering Company 2-8 canister RTOs	60% design	CO
		Pneumafil - 6.5		

Stack No./ Emission Unit No.	Control Equipment Description	Manufacturer and Date of Construction	Size/Rated Capacity	Pollutant
15 BH-6	Filter - baghouse	-92-10	99%+ design	TSP/PM10
16 BH-5	Filter - baghouse	Pneumafil - 6.5-92-10	99%+ design	TSP/PM10
18 BH-8	Filter - baghouse	Pneumafil - 6.5-92-10	99%+ design	TSP/PM10
19 BH-9	Filter - baghouse	MAC 72 - MCF 22	99%+ design	TSP/PM10
20 BH-10	Filter - baghouse	MAC 72 - AVR 52	99%+ design	TSP/PM10
21 BH-11	Filter - baghouse	MAC 144 - AVR 153	99%+ design	TSP/PM10
13 BH-1	Filter - baghouse	Pneumafil - 11.5-316-10	99%+ design	TSP/PM10
17 BH-7	Filter - baghouse	Pneumafil - 13.5-448-10	99%+ design	TSP/PM10
12 BH-4	Filter - baghouse	Pneumafil - 13.5-448-10	99%+ design	TSP/PM10
7-345 WW-1	Water wash filter		99.8% design	TSP/PM10
14a BH-2	Filter - baghouse	Pneumafil - 13.5-448-10	99%+ design	TSP/PM10
14b BH-3	Filter - baghouse	Pneumafil - 13.5-358-10	99%+ design	TSP/PM10

3. Emissions Inventory

An emission update was received for the year 2001. The actual annual emissions from the facility were 164.1 tons of PM10, 5.7 tons of SO2, 129.8 tons of NOx, 71.7 tons/yr of CO and 187.3 tons of VOC.

4. Applicable Requirements

A. Emission Unit Applicable Requirements - all requirements from 10/6/97 NSR permit (condition numbers also from 97 NSR permit)

3. Total Suspended Particulate and PM_{10} emissions from the Green Chip Handling System (Ref. #1000, Stack ID #11) shall be controlled by a cyclone. The cyclone shall be provided with adequate access for inspection. An annual internal inspection shall be conducted on the cyclone by the permittee to insure structural integrity.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

4. Total Suspended Particulate and PM_{10} emissions from the following equipment shall be controlled by fabric filters:

Ref. No.	Stack ID	Process/Equipment Description
6100	12	Panel Sanding/Tongue & Groove
5100	13	Forming & Finishing End Pickups
9100	14a	General Plant Dedusting - System A
9200	14b	General Plant Dedusting - System B
3100	15	Screen Fines Transfer
3200	16	Dry Waste Transfer
5200	17	Mat Reject System
3300	18	Sanderdust/Hog Fuel Transfer/Storage
3400	19	Grit Fines Transfer
3500	20	Fuel Screen Fines Storage Bin
3600	21	Dry Fuel Hammermill

Each fabric filter shall be provided with adequate access for inspection. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

5. Total Suspended Particulate and PM_{10} emissions from the Flake Dryers (Ref. #3000, Stack ID #52A & B) shall be controlled by a multiclone on each flake dryer with the flake dryer exhaust combining in a common settling chamber (16 feet x 50 feet) followed in series by a regenerative thermal oxidation system (RTO). The multiclones, settling chamber, and RTO shall be provided with adequate access for inspection. An annual internal inspection shall be conducted on each multiclone and on the settling chamber by the permittee to insure structural integrity.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

6. Carbon Monoxide emissions from the Flake Dryers (Ref. #3000, Stack ID #52A & B) shall be controlled by a regenerative thermal oxidation (RTO) system. The RTO shall be provided with adequate access for inspection.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

7. VOC emissions from the Flake Dryers (Ref. #3000, Stack ID #52A & B) shall be captured and controlled by a RTO. The RTO shall be provided with adequate access for

inspection. The RTO shall achieve a minimum VOC destruction efficiency of 90% for the captured VOC emissions. The 90% destruction efficiency shall be maintained at all times except during periods when the dryers are not operating or during previously scheduled startup and shutdown periods (including bakeouts and washouts). These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, the permittee shall minimize emissions to the greatest extent practicable. Whenever possible, startup and shutdown of control technology systems shall be scheduled during times when process equipment is also shut down for routine maintenance.
(9 VAC 5-80-10 H, 9 VAC 5-50-260, and 9 VAC 5-20-180 of State Regulations)

12. Total Suspended Particulate and PM_{10} emissions from the Edge Seal Spray Booth (Ref. #6200, Stack ID #7-345) shall be controlled by a water wash filter. The water wash filter shall be provided with adequate access for inspection.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

13. Volatile Organic Compound emissions from the Edge Seal Spray Booth (Ref. #6200, Stack ID #7-345) shall be controlled by the use of water-based paint having a volatile organic compound content of no more than 0.08 pounds per gallon.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

14. Unless otherwise specified, the facility roads and those portions of the log yard subject to vehicular traffic shall incorporate dust emission controls to include the following or equivalent as a minimum:

    1. For portions of the log yard subject to regular vehicular traffic, reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. The facility roads and those portions of the log yard subject to regular vehicular traffic shall be paved.

    2. For areas of the facility subject to more sporadic vehicular traffic (such as the log storage area), dust emissions shall be controlled by the use of course gravel and wet suppression or equivalent (as approved by the DEQ).

    (9 VAC 5-50-260 and 9 VAC 5-80-10 H of State Regulations)

15. Fugitive particulate emissions from the transfer, collection, and storage of wood flakes, chips, dust, fines, and waste materials shall be controlled to ensure compliance with Condition 35.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

17. The approved fuel for the Wellons Wood Fuel Burner and MEC Dry Fuel Burner (Ref. #3000) is woodwaste. "Woodwaste" is defined as wood feed stock, bark, resinated and unresinated sawdust, sanderdust, dry waste, finished board trimmings and other wood wastes capable of being hogged. This definition does not include wood contaminated with paints, plastics, finishing material, other foreign materials which might emit toxic air pollutants when burned, or other chemical treatments, except the woodwaste may contain small quantities of edge seal spray paint, resins and waxes from the flake blending area, equipment washdown oil, and oil contaminated spill cleanup material generated at the permitted facility. The woodwaste may also contain small quantities of fuel oil for use during burner startup. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-20-110 of State Regulations)

18. The approved fuel for the backup burners to the Wellons Wood Fuel Burner and MEC Dry Fuel Burner (Ref. #3000) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-20-110 of State Regulations)

20. The Wellons Wood Fuel Burner and MEC Dry Fuel Burner (Ref. #3000) shall consume no more than 241,268 dry tons of woodwaste per year, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).
(9 VAC 5-20-110 of State Regulations)

21. The Flake Dryers (Ref. #3000, Stack ID #52A & B) shall process no more than 325,000 dry tons of wood flakes per year, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).
(9 VAC 5-20-110 of State Regulations)

22. The Board Press (Ref. #5000, Stack ID #54) shall process no more than 280,000 dry tons of wood flakes per year, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).
(9 VAC 5-20-110 of State Regulations)

23. The annual throughput of spray paint to the Edge Seal Spray Booth (Ref. #6200, Stack ID #7-345) shall not exceed 85,000 gallons, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).
(9 VAC 5-20-110 of State Regulations)

27. Subsequent performance tests shall be conducted for Volatile Organic Compounds from the RTO stacks at least biennially to determine compliance with the destruction efficiency requirement contained in Condition 7. Tests shall be conducted and reported and the data shall be reduced as set forth in 9 VAC 5-50-30 (formerly Section 120-05-03) of State Regulations, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 (formerly Section 120-05-0502) of State Regulations. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 45 days after test completion and shall conform to the test report format enclosed with this permit unless another report format is approved by the Director, Piedmont Region prior to report submittal.
(9 VAC 5-50-30 and 9 VAC 5-80-10 J of State Regulations)

28. Emissions from the operation of the material handling systems shall not exceed the limits specified below:

System/Pollutants	gr/dscf	lb/hr	tons/yr
Green Chip Handling			
Total Suspended Particulate	0.03	0.8	3.3
PM_{10}	0.03	0.8	3.3
Panel Sanding/Tongue & Groove			
Total Suspended Particulate	0.01	3.8	16.0
PM_{10}	0.01	3.8	16.0
Forming & Finishing End Pickups			
Total Suspended Particulate	0.01	2.4	10.2
PM_{10}	0.01	2.4	10.2

System/Pollutants	gr/dscf	lb/hr	tons/yr
General Plant Dedusting - System A			
Total Suspended Particulate	0.01	3.1	13.1
PM_{10}	0.01	3.1	13.1
General Plant Dedusting - System B			
Total Suspended Particulate	0.01	2.6	11.1
PM_{10}	0.01	2.6	11.1
Screen Fines Transfer			
Total Suspended Particulate	0.01	0.5	0.9
PM_{10}	0.01	0.5	0.9
Dry Waste Transfer			
Total Suspended Particulate	0.01	0.5	1.9
PM_{10}	0.01	0.5	1.9
Mat Reject System			
Total Suspended Particulate	0.01	3.6	15.2
PM_{10}	0.01	3.6	15.2
Sanderdust/Hog Fuel Transfer/Storage			
Total Suspended Particulate	0.01	0.5	1.7
PM_{10}	0.01	0.5	1.7
Grit Fines Transfer			
Total Suspended Particulate	0.01	0.5	0.5
PM_{10}	0.01	0.5	0.5
Fuel Screen Fines Storage Bin			
Total Suspended Particulate	0.01	0.5	1.0
PM_{10}	0.01	0.5	1.0
Dry Fuel Hammermill			
Total Suspended Particulate	0.01	1.0	4.4
PM_{10}	0.01	1.0	4.4

(9 VAC 5-50-260 of State Regulations)

29. The total emissions from the operation of the Wellons Wood Fuel Burner, MEC Dry Fuel Burner, and Flake Dryers #1-4, exhausting through the RTO, shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Total Suspended Particulate	23.1	74.9
PM_{10}	23.1	74.9
Sulfur Dioxide	6.7	24.1
Nitrogen Oxides	48.5	157.5
Carbon Monoxide	20.6	66.8
Volatile Organic Compounds	17.3	56.4

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

30. Emissions from the operation of the Board Press shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Total Suspended Particulate	8.0	28.1
PM_{10}	8.0	28.1
Carbon Monoxide	5.6	19.7

Pollutants	lb/hr	tons/yr
Volatile Organic Compounds	52.8	184.8

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

31. Emissions from the operation of the Edge Seal Spray Booth shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Total Suspended Particulate	0.5	0.5
PM_{10}	0.5	0.5
Volatile Organic Compounds	0.8	3.4

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

32. Regardless of the emission limits specified in Conditions 28-31, the total emissions from the operation of the entire permitted facility shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Total Suspended Particulate	49.9	183.0
PM_{10}	49.9	183.0
Sulfur Dioxide	6.7	24.1
Nitrogen Oxides	48.5	157.5
Carbon Monoxide	26.2	86.5
Volatile Organic Compounds	70.9	244.6

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

Note: This wording of this condition was clarified in the Title V permit with respect to the meaning of “entire permitted facility”. Examination of engineering analysis for the 10/97 permit reveals the intent of the condition was to limit the PTE of all point source emission units included in the 1997 permit.

33. Visible emissions from the material handling system exhausts shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-20 and 9 VAC 5-50-260 of State Regulations)

34. Visible emissions from the Wellons Wood Fuel Burner, MEC Dry Fuel Burner, and Flake Dryers #1-4, exhausting through the RTO, shall not exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour during which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during periods when the dryers are not operating or during previously scheduled startup and shutdown periods (including bakeouts and washouts), and during periods of malfunction.
(9 VAC 5-50-260, 9 VAC 5-50-180, and 9 VAC 5-20-110 of State Regulations)

35. Visible emissions from fugitive emission points shall not exceed 10 percent opacity.
(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

37. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. The yearly throughput of woodwaste (in dry tons) to the Wellons Wood Fuel Burner and MEC Dry Fuel Burner, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).

b. The yearly throughput of wood flakes (in dry tons) to the Flake Dryers, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).

c. The yearly throughput of wood flakes (in dry tons) to the Board Press, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).

d. The yearly throughput of spray paint (in gallons) to the Edge Seal Spray Booth, calculated as the sum of each consecutive 12-month period (i.e. the 12-month rolling total).

e. RTO continuous parametric monitoring readings pursuant to the requirements of Condition 11 of this permit.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50 of State Regulations)

40. The emission limitations contained in this permit shall be maintained at all times except during periods when the respective equipment is not operating or during previously scheduled startup and shutdown periods (including bakeouts and washouts). These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, the permittee shall minimize emissions to the greatest extent practicable. Whenever possible, startup and shutdown of control technology systems shall be scheduled during times when process equipment is also shut down for routine maintenance.
(9 VAC 5-20-180 of State Regulations)

B. Generally Applicable Requirements

Certain conditions within existing NSR permits may be applicable to all newly constructed or modified equipment that receive a permit. Below is a listing of these conditions from the 10/97 NSR permit:

Condition #42
In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.

2. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.

(9 VAC 5-170-160 of State Regulations)

Condition #43
The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training.
(9 VAC 5-170-160 of State Regulations)

These conditions are being retained in the Title V permit because 1) they are applicable requirements generally applied to all modified and newly constructed equipment permitted through the minor NSR permit program; 2) they have an impact on the prevention of excess emissions and therefore are not environmentally insignificant; and 3) they require recordkeeping and reporting that may be included in periodic monitoring requirements.

C. State-Only Requirements

In addition to criteria pollutants, the 10/97 NSR permit contains several references to formaldehyde and phenol emissions, two substances which are judged to be toxic compounds for the purposes of VA DEQ=s toxic pollutant regulation for new and modified sources, 9 VAC 5-50-180 (Rule 5-3). As this regulation is not SIP approved, emission limitations based on it are not federally enforceable applicable requirements; they are state-only requirements. VA DEQ=s current policy for state-only requirements is to only include them in Title V permits at the request of the source. GP has made such a request. Therefore the following requirements will be included in the Title V permit in a Astate enforceable only@ section separate from the federally enforceable requirements of the rest of the Title V permit.

6. Formaldehyde emissions from the Flake Dryers (Ref. #3000, Stack ID #52A & B) shall be controlled by a regenerative thermal oxidation (RTO) system. The RTO shall be provided with adequate access for inspection.
(9 VAC 5-80-10 H and 9 VAC 5-50-260 of State Regulations)

29. The total emissions from the operation of the Wellons Wood Fuel Burner, MEC Dry Fuel Burner, and Flake Dryers #1-4, exhausting through the RTO, shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Formaldehyde	1.4	4.4

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

30. Emissions from the operation of the Board Press shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Formaldehyde	1.6	5.7
Phenol	0.5	1.7

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

32. Regardless of the emission limits specified in Conditions 28-31, the total emissions from the operation of the entire permitted facility shall not exceed the limits specified below:

Pollutants	lb/hr	tons/yr
Formaldehyde	3.0	10.1
Phenol	0.5	1.7

(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

The state-only requirements above are from permit conditions 6, 29, 30 and 32 of GP=s 10/97 NSR permit. These conditions also included criteria pollutant requirements which are included above in the federal applicable requirement section (section A).

UPDATE: *The current position of DEQ/EPA is that all emission limitations contained in Virginia's SIP-approved minor source permitting program are federally enforceable applicable requirements for the purposes of the Title V permitting program regardless of the status of the underlying requirement regulation re: federal enforceability. Thus, even though the state toxic regulations the above conditions are based upon are not SIP-approved, the conditions themselves are federally enforceable applicable requirements and must appear in the facility's Title V permit. These conditions have therefore been placed in the main (federally enforceable) section of the facility's Title V permit. Therefore, there are no state-only requirements applicable to this facility.*

D. Future Applicable Requirements - N/A

E. Inapplicable Requirements

Because all of the significant emission units at the source were included in the 1997 NSR permit and meet BACT requirements, there are no Part IV (Chapter 40) standards that apply to any of GP=s emission units.

F. Obsolete Requirements

Certain conditions of the 10/97 NSR permit for the source are obsolete, no longer serve any meaningful purpose, and are unnecessary for Title V considerations. Condition 36 contains the notification requirements for construction and testing and has been removed deemed obsolete since the notifications are one-time requirements and have already been preformed. Similarly, the performance test requirements of Conditions 24, 25, and 26 have been deemed obsolete for Title V purposes since these were one time requirements that have already been performed. Condition 16 is also being left out of the Title V permit because it concerns the shutdown of the old ESP, which has already been accomplished. As the facility and its emission points have already been constructed, stacktested, and monitored, Condition 19 has been met and is now obsolete.

Condition 38 is being left out of the Title V permit because the condition defines the causes for modification or revocation of an NSR permit which can be considered extraneous to the Title V permit. The assumption underlying this determination is that if an NSR permit is revoked or modified through unsolicited action by DEQ, the Title V permit will be changed in a separate and independent action from the NSR change. The Title V permit will change to reflect the changes in applicable requirements brought about by the NSR change.

Condition 39 is not being included as an applicable requirement in the Title V permit because it is out-dated. The Part 70 regulations define specific inspection and entry requirements consistent with the issuance of a TITLE V permit. These requirements are described in Condition Q in the General Permit Condition Section of the Title V permit and are at least as stringent as the NSR requirements. Inclusion of this condition would be redundant and the requirements have been overtaken by the Title V (Part 70) regulations.

Condition 41 is not being included as an applicable requirement in the Title V permit because its' provisions are included in the Conditions C, E and F in the General Permit Condition Section of the Title V permit and is included as part of the malfunction reporting requirements for the overall permit. Including this condition as a separate enforceable condition on the permitted equipment in addition to the entire listing of equipment covered

by the TITLE V permit creates a situation where conditions are both redundant and confusing.

Condition 44 is not being included as an applicable requirement in the Title V permit because the condition, which voids the permit if modification is not commenced within 18 months, is obsolete and environmentally insignificant. These determinations are consistent with the conditions set down in the White Paper dated July 10, 1995 because the modification outlined in both these permits has already been accomplished.

Condition 45 is not being included as an applicable requirement in the Title V permit because it is redundant. Condition T in the General Permit Condition Section of the Title V permit describes the requirements for transfer of ownership relative to the Title V permit. The transfer of ownership requirements for the NSR permit are therefore inappropriate for inclusion in the Title V permit.

Conditions 8, 9, 10, and 11 concern the establishment of a parametric monitoring system at the facility to demonstrate the achievement and maintenance of the VOC destruction efficiency required by Condition 7. This parametric monitoring system has been developed by the source and approved by EPA. As such, the provisions of this plan will be included in the Title V permit as periodic monitoring for the facility-s RTOs (see the periodic monitoring section below for details). Since with the issuance of this Title V permit the requirements of conditions 8-11 will be fulfilled, they are deemed obsolete and not included in the Title V permit.

Finally, two emission units/points identified in Condition 2 (the Sanderdust Storage Bin - Stack #22 and the Sanderdust Fuel Transfer System - Stack #23) were installed at the facility in a different configuration than the 1997 permit was written for. The 10/97 permit includes control equipment requirements (fabric filters - condition 4) and emission limits (condition 28) for these two units based on information (supplied in the source's permit application) that these two unit would each have separate emission points controlled by fabric filters. In actuality, although these two emission units were installed, their emissions were ducted into fabric filter and exhaust of another emission unit at the plant, the Hog Fuel Transfer/Storage system - stack #18. This Hog Fuel system has its own control equipment requirement and emission limit in conditions 4 and 28, respectively. Since any emissions from the Sanderdust Storage Bin and the Sanderdust Fuel Transfer System are governed by the requirements on the Hog Fuel Transfer/Storage system, the separate control equipment and emission limit requirements in Conditions 4 and 28 for these two units are deemed obsolete and will not be included in the Title V permit.

G. Streamlining of Requirements – NSPS Subpart **Db**

Although, no requirements are being "officially" streamlined, this section of the SOB has been selected for the discussion of the source's NSPS status.

Similar Wellons wood fuel cells at other OSB facility's have been determined (by DEQ and/or EPA) to be subject to NSPS Subpart **Dc** (10-100 MMBtu/hr) or **Db** (100-250 MMBtu/hr) in the past. These include the Wellons units operated at the GP Brookneal, Virginia facility and the J.M. Huber Virginia facility. In contrast, GP has stated that the Skippers Wellons unit is not subject to either regulation because EPA was incorrect in applying any NSPS to a Wellons fuel cell type of unit. Further, GP argues, that even if the Wellons unit at Skippers was regulated by an NSPS, it would be NSPS Subpart **Dc**. This is because the thermal oil heat exchanger at the Skippers unit is rated at 30 MMBtu/hr (the heat input capacity of the entire Wellons unit is 210 MMBtu/hr; the balance of the heat energy is used in the wafer dryers). It is GP's position that any NSPS applicability should be based on just the portion of the Wellons unit used for indirect heat transfer. If

GP's interpretation is used, the facility could only be potentially subject to NSPS **Dc**. Since the Skippers Wellons unit was not constructed/modified after the NSPS **Dc** applicability date (June 9, 1989), the Skippers Wellons unit is not currently subject to NSPS **Dc**. This interpretation appears to be in accordance with EPA's decision in the J.M. Huber case.

However, in other instances (EPA API determination 9600071, VADEQ's GP-Brookneal determination), NSPS applicability has been applied to Wellons type units based on the total maximum rated heat input capacity of the unit in question (as actually stated in the NSPS's themselves) regardless of the % of the heat used for indirect heat transfer. If this interpretation is correct, the Skippers Wellons unit would be evaluated for NSPS applicability based upon the provisions of NSPS **Db**. Since the NSPS **Db** applicability date is 6/19/84 and the Skippers Wellons unit was modified in 1988 (increased from 160 MMBtu/hr to 210 MMBtu/hr), the Skippers Wellons unit would be subject to NSPS **Db**.

Given the conflicting data on which NSPS regulation to determine applicability with and the fact that the potentially triggering modification occurred in 1988, DEQ Piedmont Regional Office (PRO) enforcement staff have declined to pursue enforcement action against GP, at this time. The permitting staff of PRO therefore has no firm foundation upon which to base a decision on the inclusion of the any NSPS requirements in the Title V permit. Therefore, in order to facilitate Title V issuance goals, **the NSPS status of the Skippers Wellons unit is being deferred**. No NSPS **Db** requirements will be included in the permit, nor will NSPS **Db** be listed in the Permit Shield section of the Title V permit (as the facility has requested). This decision will be reviewed with respect to any new information at the time of permit renewal.

One factor considered in this decision to defer a final NSPS **Db** applicability determination is the stringency of the applicable requirements already contained for the Wellons unit in the Title V permit. For a unit of the size/type of the Skippers Wellons units, the NSPS **Db** requirements would primarily be a 0.1 lb/MMBtu particulate emission standard, a 20 % opacity standard, and an opacity CEM to monitor compliance. As the Skippers Wellons units currently has a particulate control system consisting of a multiclone in series with two RTOs, the 0.1 lb/MMBtu emission standard is almost certainly being currently complied with by the unit. The overall particulate limit for the RTOs is 23.1 lbs/hr (compared to 21.0 lbs/hr (210 MMBtu/hr * 0.1 lb/MMBtu) that would be allowed under the NSPS), however this 23.1 figure also includes particulate generated in the 4 chip dryers and from a separate 50 MMBtu/hr wood-fired burner contained in one dryer (this burner is clearly not subject to the NSPS since all of its heat is applied directly to the wood chips and none is applied for indirect heat transfer). Similarly, the unit is already subject to a 20% opacity standard from the 1997 minor NSR permit, and there has been no history of opacity problems with the Skippers Wellons unit since the installation of the RTOs. The Title V permit requires weekly opacity observations as periodic monitoring for the 1997 permit's opacity standard. Thus, the Title V permit likely already contains particulate/opacity emission limitations which are equal to or more stringent than those of the NSPS. However, an opacity CEM would certainly constitute a more comprehensive degree of monitoring than currently included in the Title V permit.

5. Standard Terms and Conditions

a. Facility Wide Conditions and Permit Terms

New Source Standard for visible emissions - The new source opacity limit (20% opacity) is applied to the Edge Seal Spray Booth (#6200) and the Board Press (#5000) since these are new and modified sources that did not receive specific opacity limits in the 10/97 permit. All other equipment at the facility were given opacity limits in the 10/97 permit.

b. General Permit Conditions

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by ? ? 2.1-20.01:2 and ' ? 10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources
B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

This general condition cites the sections that follow:

B. 9 VAC 5-80-80. "Application"
B.2. 9 VAC 5-80-150. "Action on Permit Applications"
B.3. 9 VAC 5-80-80. "Application"
B.4. 9 VAC 5-80-80. "Application"
B.4. 9 VAC 5-80-140. "Permit Shield"
B.5. 9 VAC 5-80-80. "Application"

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

Please note there are proposed regulation changes that could affect this condition. The requirement listed in section 9 VAC 5-20-180 to report excesses emissions within 4 business hours may be changed to require reporting of excess emissions within 6 hours.

This general condition cites the sections that follow:

F. 9 VAC 5-40-50. Notification, Records and Reporting
F. 9 VAC 5-50-50. Notification, Records and Reporting

U. Failure/Malfunction Reporting

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

U.2.d. 9 VAC 5-80-110. Permit Content
U.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

6. Periodic Monitoring

The EPA periodic monitoring guidance, dated September 18, 1998, indicates on page 4 that periodic monitoring is required for each emission point at a source, subject to Title V of the Act, that is subject to an applicable requirement. The applicable periodic monitoring is defined as follows:

Conditions #3 and #4 (all conditions referenced in this section are from the 10/97 permit):
These conditions require the use of a cyclone (condition 3) and fabric filters (condition 4) to control PM/PM-10 emissions from various process equipment/operations. In addition, Condition 3 requires an annual inspection of the cyclone for structural integrity and Condition 4 requires each fabric filter to be equipped with a device to continuously measure differential pressure drop across the fabric filter and that this device be maintained in proper working order at all times. These existing requirements, annual cyclone inspection and continuous pressure drop monitoring, are sufficient monitoring to insure that PM/PM-10 emissions are actually being controlled by the respective control devices, and thus satisfy periodic monitoring. To be consistent with the Ttile V permit written by Lynchburg Office for the GP-Brookneal facility, the wording of this condition was amended to clarify the nature of the terms “continuously” and “at all times”: “For the purposes of this condition, “continuously” means that the monitoring system is capable of completing at least one cycle of operation (sampling) every 15 minutes. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times, except during system breakdowns/repairs, calibration checks, and zero and span adjustments.”

Conditions #5 and #6:
These conditions require the use of a multiclone, settling chamber and RTO to control particulate emissions (condition 5) from the flake dryers and RTO to control CO and formaldehyde emissions (condition 6) from the flake dryers. In addition Condition 5 also requires an annual inspection of the structural integrity of the multiclone and settling chamber. As noted above for the cyclone, these annual inspections are sufficient periodic monitoring for the multiclone and settling chamber. Monitoring for the operation/presence of the RTO and its affect on PM/PM-10, formaldehyde and CO emissions will be discussed at the end of this section in a periodic monitoring section specific to the RTO.

Conditions #7:
Requires the use of an RTO to achieve 90% control of VOC emissions from the flake dryers. All periodic monitoring for the RTOs will be discussed as a whole at the end of this section.

Conditions #12:
Requires the use of a water wash filter to control PM/PM-10 emissions from the spray booth. The water wash filter was installed on the spray booth when it was constructed. Weekly

recordkeeping indicating that the water wash filter is properly maintained and operated is sufficient periodic monitoring for this requirement.

Conditions #13:
Requires the use of a water based paint with a VOC content no more than 0.08 lbs/gal to control VOC emissions from the spray booth. Recordkeeping of the MSDS sheets including VOC content in lbs/gal for each paint used in the spray booth is sufficient to meet periodic monitoring for this requirement.

Conditions #14 and #15:
Requires the use of paved roads, gravel, and wet suppression to control fugitive dust emissions from vehicle traffic and the control of fugitive emissions from the transfer, collection, and storage of various wood materials to the extent that the facility=s general fugitive dust opacity requirement, Condition 35, is met. Since the level of emissions control required by this provision is dependant on the amount necessary to achieve compliance with the condition 35, periodic monitoring for this requirement will be implemented through periodic monitoring of facility=s general fugitive dust opacity requirement (condition 35), i.e. if Condition 35's opacity requirement is reasonably determined to be in compliance, then the dust controls required by conditions 14 and 15 can be reasonably judged to be appropriately effective.

Conditions #17 and #18:
Requires the use of either natural gas or woodwaste as fuels for various combustion devices. As the relevant equipment is unable to combust any other fuels, periodic monitoring for these requirements is unnecessary as a reasonable assurance of continuing compliance inherently exists.

Conditions #20-23:
These four conditions all limit the annual throughputs of various materials in the facility. Sufficient Periodic monitoring for these conditions already exists in the form of condition 37 which requires monthly recordkeeping of the material throughputs limited by these four conditions. These recordkeeping provisions of condition 37 will be included in the Title V permit.

Conditions #27:
This condition requires biennial stacktesting on the RTO stacks for VOCs. No periodic monitoring is required for this requirement since each stacktest will include protocols, reports, etc. sufficient to provide evidence of compliance.

Conditions #28 and #33:
These conditions contain emission limits in lbs/hr, tons/yr and gr/dscf (0.01 gr/dscf for fabric filters and 0.03 gr/dscf for the green chip cyclone) and opacity limits (5% for each stack) for each of the facility=s cyclone and fabric filters. The 5% opacity limit represents BACT for opacity from such air pollution control devices. The grain loading of each device is based on manufacturer’s guarantee and conforms to accepted performance levels for the respective equipment. The lbs/hr numbers in the condition were derived by multiplying the respective grain loading limit for each emission point by the maximum fan/blower rating for each emission point. The tons/yr number was then obtained by multiplying the lbs/hr number by 8760 hrs/yr and converting from lbs to tons. Since the fan capacities of each emission point is fixed, achieving compliance with the lbs/hr and tons/yr numbers depend solely on the gr/dscf values; if the gr/dscf standards are being met then the lbs/hr and tons/yr emissions are also in compliance. Given the widespread availability of information confirming the ability of these control equipment types to achieve their respective grain loading standards, the only way in which a standard might not be met would be if the equipment malfunctioned or was poorly maintained. Under normal operating conditions (i.e. achieving their respective grain loading standards), there should be no visible emissions from the any of these control devices, so any of these control devices operating in a malfunctioning or poorly maintained state should be readily identifiable by the presence of visible emissions.

Therefore, as long as there are no visible emissions from any of these units, the unit would be meeting its opacity limit, should be operating properly, should be meeting its grain loading requirement, and therefore should be meeting its lbs/hr and tons/yr emission limits. Periodic monitoring for these standards is therefore determined to be weekly visible emission observations of each emission point followed by corrective action to any unit where any visible emissions were observed as follows:

> A*Each emissions unit shall be observed visually at least once each operating week for at least a brief time period to determine which emissions units have any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having any visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.*@

Condition #29 - hourly emission limits (RTO periodic monitoring - parametric monitoring plan)
Contains hourly and annual emission limits for the Wellons wood fuel burner, the MEC dry fuel burner, and the four flake dryers as exhausted through the RTO. The hourly emission limits established for TSP, PM10, NOx, CO, SO2, formaldehyde and VOC are based on the total drying capacity of the four flake dryers and (for TSP/PM10, NOx, CO, formaldehyde and VOC) the control efficiency provided by multiclone/settling chamber/RTO emission control system. Therefore, if the four dryers are operated at capacity, or below, and the emission control system is operating properly, there should not be a violation of the hourly emission rates listed above. Calculations have been included in Attachment 1 to demonstrate how the limits were obtained. The only periodic monitoring for the fuel cell/dryer system itself will be the requirement for recordkeeping of the TSP, PM10, VOC, SO2, CO, formaldehyde and NOx emission factors. Proper operation of the emission control system with respect to the particulate emissions from the fuel cell/dryers system can be ascertained from the opacity of the RTO exhaust. Weekly checks of opacity from the RTO exhausts will determine whether or not the opacity of the emissions from the RTO stack are normal. If opacity readings are normal, then the RTO can reasonably be assumed to be operating correctly with respect to particulate emissions and therefore, as shown in the attached calculations mentioned previously, the hourly TSP and PM10 emission limits are being met. Abnormally high opacity readings will be interpreted as a sign that the emission control system may not be operating properly with respect to controlling particulate emissions from the fuel cell/dryer system, and the source will take corrective action to return to the opacity to a normal state within a reasonable time frame. Proper operation of the emission control system of the fuel cell/dryer system with respect to CO, formaldehyde, VOC, and NOx shall be determined as outlined in the source=s parametric monitoring protocol approved by EPA in April of 1999. This protocol requires the monitoring of RTO retention chamber temperature and outlet volumetric air flow with readings of each recorded every 15 minutes and averaged every 12 hours. Secondary monitoring required includes the static pressure at the inlet of the RTO ID fans and the position of the RTO isolation dampers with readings of the static pressures recorded every 15 minutes and averaged every 12 hours and with the recording of each isolation damper position change. As stated in the parametric monitoring plan, maintenance of the RTO retention chamber temperature at least 1500 degrees F and RTO flow rate of a maximum of 205,500 scfm or the highest air flow recorded during the most recent successful compliance demonstration, whichever is greater, should reasonably assure the 90% VOC destruction efficiency required by condition 7 of the 10/6/97 permit and the VOC emission limit of condition 29 which depends on the 90% VOC control efficiency. The formaldehyde emission limits of condition 29 were written into the 10//6/97 permit on the basis that formaldehyde emissions would mirror VOC emissions. Therefore, reasonable assurance of the required VOC destruction by the RTO system is sufficient to provide reasonable assurance of similar formaldehyde performance. Furthermore, with respect to NOx and CO, it was the conclusion of the parametric monitoring protocol that a minimum average RTO

retention chamber temperature of 1500 degrees F resulted in NOx and CO emissions within the NOx emission factor and controlled CO emission factors used in setting the hourly emission limits for these two pollutants in Condition 29. The emission control system has no effect on the SO2 emissions from the fuel cell/dryer system, so no additional periodic monitoring for SO2 is required.

Condition 29 - annual emission limits

Condition 29 also contains annual emission limits for TSP, PM10, VOC, NOx, CO, formaldehyde and SO2 from the fuel cell/dryer system as exhausted through the emission control system (multiclone, settling chamber, RTOs). These emission limits are based on the annual wood flake throughput limit (TSP/PM10, VOC, NOx, formaldehyde, CO) and the annual wood fuel throughput limit (SO2) contained in Conditions 21 and 20 and the proper operation of the aforementioned emission control system. Therefore, if the annual throughput limits of Conditions 21 and 20 are adhered to (see periodic monitoring for Conditions 21 and 20 above) and the emission control system is operated properly (see periodic monitoring for Condition 29 above), there should not be a violation of the annual emission limits of Condition 29. Calculations have been included (also Attachment 1) that demonstrate this.

Condition 30

Condition 30 contains hourly and annual emission limits for TSP, PM10, CO, formaldehyde, Phenol and VOC from the board press vent. These emissions from the board press are uncontrolled and are solely based on throughput of the press and emission factors for the respective pollutants. The hourly emission limits for the press are based on the maximum rated capacity of the press (40 tons/hr). Therefore, if the press is operating at capacity, or below, there should not be a violation of the hourly emission limits of condition 30. The annual emission limits from the board press in Condition 30 are based on the wood flake throughput limit of Condition 22. Therefore, if the annual throughput limit of condition 22 is adhered to (see periodic monitoring for condition 22 above), there should not be a violation of the annual emission rates of condition 30. Calculations have been included in Attachment 2 to demonstrate how the hourly and annual limits were obtained. For both the hourly and annual emission limits from the board press, then, the only additional periodic monitoring will be the requirement for recordkeeping of emission factors for TSP, PM10, CO, formaldehyde, Phenol and VOC from the board press.

Condition 31

Condition 31 contains hourly and annual TSP, PM10, and VOC emission limits for the edge seal spray booth. The hourly emission limits are based on the maximum rated capacity of the spray booth in gallons of coating per hour while the annual limits are based on the annual coating throughput limit in Condition 23. In addition, the hourly and annual VOC emission limits of Condition 31 are also based on the 0.08 lb VOC/gal coating standard of Condition 13, while the TSP and PM10 emission limits of Condition 31 are also based on the proper operation of the water wash filter required by Condition 12. Therefore, if the requirements of conditions 12, 13, and 23 are being complied with (as demonstrated by the periodic monitoring associated with each of those conditions), there should not be a violation of the emission limits of condition 31. Calculations have been provided in Attachment 3 which demonstrate this. The only additional periodic monitoring necessary for the emission limits of condition 31 then is the requirement for the source to keep records of the emission factors used to generate the emission limits.

Condition 32

No periodic monitoring is necessary for condition 32 since the facility-wide hourly and annual emission limits of condition 32 are simply the summations the emission limits of conditions 28, 29, 30, and 31. As long as the periodic monitoring for those conditions indicate compliance, then the source should reasonably be in compliance with condition 32.

Condition 34
Visible emissions from the fuel cell/dryer system as exhausted through the RTO stacks shall not exceed 20% opacity by EPA Method 9, except for startup, shutdown, and malfunction. Periodic monitoring shall be as follows:

AEach RTO exhaust shall be observed visually at least once each operating week for at least a brief time period to determine which RTO exhaust have normal visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having above-normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.@

Condition 35
Visible emissions from fugitive emission points shall not exceed 10% opacity by EPA Method 9, except for startup, shutdown, and malfunction. Periodic monitoring shall be as follows:

AEach fugitive emissions point shall be observed visually at least once each operating week for at least a brief time period to determine which fugitive emissions points have normal visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions point. Each emissions point observed having above-normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.@

New and Modified Source General Opacity Standard
Visible emissions from fugitive emission points shall not exceed 20% opacity by EPA Method 9, except for startup, shutdown, and malfunction. Periodic monitoring shall be as follows:

AEach emissions point shall be observed visually at least once each operating week for at least a brief time period to determine which emissions points have normal visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions point. Each emissions point observed having above-normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.@

General
For all actual monitoring (i.e. weekly opacity checks, weekly/monthly inspections, temperature readings, etc.), records shall be kept to verify the occurrence and results of the monitoring. In addition, the source shall submit to the DEQ reports of any opacity observations which reveal visible emissions in excess of an applicable standard or any temperature or flow data from an RTO outside of an applicable operating range. Finally, semiannual compliance certifications shall be submitted in accordance with 9 VAC 5-80-110 F of state regulations.

7. Insignificant Activities -

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
1400	Fuel Hog	5-80-720 B.	TSP/PM10	33.3 tons/hr.

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
1500	Green Truck Bin	5-80-720 B.	TSP/PM10	6,000 ft^3
3700	Super Fines Truck Bin	5-80-720 B.	TSP/PM10	12,400 ft^3
3750	Screen Fines Truck Bin	5-80-720 B.	TSP/PM10	18,800 ft^3
3800	Dry Fuel Silo	5-80-720 B.	TSP/PM10	9,600 ft^3
3850	Sanderdust Silo	5-80-720 B.	TSP/PM10	4,600 ft^3
3900	Raw Fuel Storage Bin (MEC Dry Fuel Burner)	5-80-720 B.	TSP/PM10	3,600 ft^3
3950	Prepared Fuel Metering Bin (MEC Dry Fuel Burner)	5-80-720 B.	TSP, PM10	1,800 $ft.^3$
T1	10,000 Gallon Diesel Fuel Storage Tank	5-80-720 B.	VOC	10,000 Gallons
T2	300 Gallon Gasoline Storage Tank	5-80-720 B.	VOC	300 Gallons
T3	300 Gallon Diesel Fuel Storage Tank	5-80-720 B.	VOC	300 Gallons
T10 T11	275 Gallon Diesel Fuel Storage Tanks	5-80-720 B.	VOC	275 Gallons
T12 T13	10,000 Gallon Wax Storage Tanks	5-80-720 B.	VOC	10,000 Gallons
T15	15,000 Gallon Thermal Oil Storage Tank	5-80-720 B.	VOC	15,000 Gallons
T16	11,200 Gallon Hydraulic Oil Use Tank	5-80-720 B.	VOC	11,200 Gallons
T18, T19, T20, T21	10,000 Gallon Resin Storage Tanks	5-80-720 B.	VOC	10,000 Gallons

8. Public Participation

The draft permit went to public notice in the Richmond Times-Dispatch on October 20, 2002. The public comment period expired on November 18, 2002. No public comments were received. The EPA 45-day review period ended on December 3, 2002. No comments were received from EPA.

9. Confidentiality

No confidential information was identified by the source.

Georgia-Pacific Corporation
Registration No. 50941
October 2002

Attachment 1 - Title V Statement of Basis
Emission Calculation Demonstration for Periodic Monitoring
Condition #29 of 10/97 permit
Hourly and annual pollutant emissions from the fuel cell/dryer system
as exhausted from the RTO system

- One Wellons wood fuel cell rated at 250 MMBtu/hr, one MEC wood-fired burner rated at 50 MMBtu/hr and four wood flake dryers with a total maximum rated capacity of 50 tons/hr
- wood flake throughput: 50 tons/hr; 325,000 tons/yr
- wood fuel throughput: 241,268 tons/yr at 4500 Btu/lb which yields 2,171,412 MMBtu/yr

Emission Data

Pollutant	Emission factor	Source	Control Efficiency
TSP	4.61 lb/ton	stacktest	90%
PM10	4.61 lb/ton	stacktest	90%
SO2	0.0222 lb/MMBtu	stacktest	0%
CO	1.87 lb/ton	stacktest	78%
VOC	3.47 lb/ton	stacktest	90%
Formaldehyde	0.273 lb/ton	stacktest	90%
NOx	0.969 b/ton	stacktest	0%

Hourly Emissions

TSP	- 50 tons/hr * 4.61 lbs/ton * 0.1	= 23.1 lb/hr
PM10	- 50 tons/hr * 4.61 lbs/ton * 0.1	= 23.1 lb/hr
NO2	- 50 tons/hr * 0.969 lbs/ton	= 48.5 lb/hr
SO2	- 0.0222 lb/MMBtu * 300 MMBtu/hr	= 6.7 lb/hr
CO	- 50 tons/hr * 1.87 lbs/ton * 0.22	= 20.6 lb/hr
VOC	- 50 tons/hr * 3.47 lbs/ton * 0.1	= 17.3 lb/hr
FORM	- 50 tons/hr * 0.273 lbs/ton * 0.1	= 1.4 lb/hr

Annual Emissions

TSP	- 325,000 tons/yr * 4.61 lbs/ton * 0.1 / 2000 lbs/ton	= 74.9 tons/yr
PM10	- 325,000 tons/yr * 4.61 lbs/ton * 0.1 / 2000 lbs/ton	= 74.9 tons/yr
NO2	- 325,000 tons/yr * 0.969 lbs/ton / 2000 lbs/ton	= 157.5 tons/yr
SO2	- 2,171,412 MMBtu/yr * 0.0222 lb/MMBtu / 2000 lbs/ton	= 24.1 tons/yr
CO	- 325,000 tons/yr * 1.87 lbs/ton * 0.22 / 2000 lbs/ton	= 66.8 tons/yr
VOC	- 325,000 tons/yr * 3.47 lbs/ton * 0.1 / 2000 lbs/ton	= 56.4 tons/yr
FORM	- 325,000 tons/yr * 0.273 lbs/ton * 0.1 / 2000 lbs/ton	= 4.4 tons/yr

Georgia-Pacific Corporation
Registration No. 50941
October 2002

Attachment 2 - Title V Statement of Basis
Emission Calculation Demonstration for Periodic Monitoring
Condition #30 of 10/97 permit
Hourly and annual pollutant emissions from the board press

- One board press with a maximum rated capacity of 40 tons/yr
- wood flake throughput: 40 tons/hr; 280,000 tons/yr

Emission Data

Pollutant	Emission factor	Source
TSP	0.201 lb/ton	stacktest
PM10	0.201 lb/ton	stacktest
CO	0.141 lb/ton	stacktest
VOC	1.32 lb/ton	stacktest
Formaldehyde	0.0408 lb/ton	stacktest
Phenol	0.0118 lb/ton	stacktest

Hourly Emissions

TSP	- 40 tons/yr * 0.201 lbs/ton	= 8.0 lb/hr
PM10	- 40 tons/yr * 0.201 lbs/ton	= 8.0 lb/hr
CO	- 40 tons/yr * 0.141 lbs/ton	= 5.6 lb/hr
VOC	- 40 tons/yr * 1.32 lbs/ton	= 52.8 lb/hr
FORM	- 40 tons/yr * 0.0408 lbs/ton	= 1.6 lb/hr
PHEN	- 40 tons/yr * 0.0118 lbs/ton	= 0.5 lb/hr

Annual Emissions

TSP	- 280,000 tons/yr * 0.201 lbs/ton / 2000 lbs/ton	= 28.1 tons/yr
PM10	- 280,000 tons/yr * 0.201 lbs/ton / 2000 lbs/ton	= 28.1 tons/yr
CO	- 280,000 tons/yr * 0.141 lbs/ton / 2000 lbs/ton	= 19.7 tons/yr
VOC	- 280,000 tons/yr * 1.32 lbs/ton / 2000 lbs/ton	= 184.8 tons/yr
FORM	- 280,000 tons/yr * 0.0408 lbs/ton / 2000 lbs/ton	= 5.7 tons/yr
PHEN	- 280,000 tons/yr * 0.0118 lbs/ton / 2000 lbs/ton	= 1.7 tons/yr

Georgia-Pacific Corporation
Registration No. 50941
June 1999

Attachment 3 - Title V Statement of Basis
Emission Calculation Demonstration for Periodic Monitoring
Condition #31 of 10/97 permit
Hourly and annual criteria pollutant emissions from the edge seal spray booth

- One edge seal spray booth with a maximum rated capacity of 10 gals/hr
- coating throughput: 10 gals/hr; 85,000 gals/yr; 0.08 lbs VOC/gal coating
- water wash filter control device: 99% control of TSP/PM10

Emission Data

Pollutant	Emission factor	Source
TSP	1.0 lbs/gal	source data (includes transfer efficiency factor)
PM10	1.0 lbs/gal	source data (includes transfer efficiency factor)
VOC	0.08 lbs/gal	Source MSDSs

Hourly Emissions

TSP	- 10 gals/hr * 1.0 lbs/gal * 0.01	= 0.1 lbs/hr
PM10	- 10 gals/hr * 1.0 lbs/gal * 0.01	= 0.1 lbs/hr
VOC	- 10 gals/hr * 0.08 lbs/ton	= 0.8 lbs/hr

Annual Emissions

TSP	- 85,000 gals/yr * 1.0 lbs/gal * 0.01 / 2000 lbs/ton	= 0.4 tons/yr
PM10	- 85,000 gals/yr * 1.0 lbs/gal * 0.01 / 2000 lbs/ton	= 0.4 tons/yr
VOC	- 85,000 gals/yr * 0.08 lbs/gal / 2000 lbs/ton	= 3.4 tons/yr

Note: Since the hourly and annual emissions of both TSP and PM10, 0.1 lbs/hr and 0.4 tons/yr, were calculated to be less than 0.5, their permitted emission limits were set at 0.5 lbs/hr and 0.5 tons/yr in the 10/97 permit. This is a VA DEQ policy regarding emission limits. The fact that these calculations demonstrate emissions equal to or lower than the permitted emission limits gives a reasonable assurance of compliance for Title V purposes.